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(Acts whose publication is obligatory)

COMMISSION REGULATION (EC) No 2293/1999
of 14 October 1999
extending the provisional authorisations of certain additives in feedingstuffs

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Directive 70/524/EEC of 23 November 1970 concerning additives in feedingstuffs [1], as last amended by Commission Regulation (EC) No 1636/1999 [2], and in particular Article 3, thereof,

(1) Whereas Article 9e(1) of Directive 70/524/EEC provides that a provisional authorisation of new additives or new uses of additives may be given, if at the level permitted in feedingstuffs, it does not adversely affect human or animal health or the environment, nor harm the consumer by altering the characteristics of livestock products, if its presence in feedingstuffs can be controlled, and it is reasonable to assume, in view of the available results, that it has a favourable effect on the characteristics of those feedingstuffs or on livestock production when incorporated in such feedingstuffs;

(2) Whereas Directive 70/524/EEC provides that provisional authorisations are given as from 1 October 1999 on a Community level for a period that may not exceed four years; whereas the additives or uses of additives provsionally authorised for the first time between 1 April 1998 and 30 September 1999 are subject to national provisional authorisations expiring on 30 September 1999; whereas it is appropriate to extend the said provisional authorisations;

(3) Whereas the Commission has consulted the Scientific Committee for Animal Nutrition concerning the provisional authorisation of the enzymes and micro-organisms included in the Annex to the present Regulation, whereas the Committee delivered an opinion in particular with regard to the safety of these additives;

(4) Whereas the measures provided for in this Regulation are in accordance with the opinion of the Standing Committee for Feedingstuffs,

HAS ADOPTED THIS REGULATION:

Article 1

Additives referred to in the Annex to this Regulation are authorised in accordance with Directive 70/524/EEC under the conditions laid down in this Annex.

Article 2

This Regulation shall enter into force on 1 October 1999.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 14 October 1999.

For the Commission
David BYRNE
Member of the Commission

[1] OJ L 270, 14.12.1970, p. 1.
[2] OJ L 194, 27.7.1999, p. 17.

ANNEX

COLOURING MATTERS INCLUDING PIGMENTS

No (or EC No)	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					mg/kg of complete feedingstuff			
1. Carotenoids and xanthophylls								
E 160a	Beta-carotene	$C_{40}H_{56}$	Canaries	—	—	—	—	30.9.2000 [a]
E 161g	Canthaxanthin	$C_{40}H_{52}O_2$	Pet and ornamental birds	—	—	—	—	30.9.2000 [a]
2. Other colouring matter								
12	Astaxanthin-rich *Phaffia rhodozyma* (ATCC 74219)	Concentrated biomass of the yeast *Phaffia rhodozyma* (ATCC 74219), killed, containing at least 4,0 g astaxanthin per kilogram of additive and having a maximum ethoxyquin content of 2 000 mg/kg	Salmon	—	—	100	The maximum content is expressed as astaxanthin Use permitted only from the age of six months onwards. The mixture of the additive with canthaxanthin is allowed provided that the total concentration of astaxanthin and canthaxanthin does not exceed 100 mg/kg in the complete feedingstuff Ethoxyquin content to be declared	30.9.2000 [a]
			Trout	—	—	100	The maximum content is expressed as astaxanthin Use permitted only from the age of six months onwards The mixture of the additive with canthaxanthin is allowed provided that the total concentration of astaxanthin and canthaxanthin does not exceed 100 mg/kg in the complete feedingstuff Ethoxyquin content to be declared	30.9.2000 [a]

TRACE ELEMENTS

EC No	Element	Additive	Chemical formula	Maximum content of the element in mg/kg of the complete feedingstuff	Other provisions	Period of authorisation
E 4	Copper-Cu	Copper-lysine sulphate	$Cu(C_6H_{13}N_2O_2)_2.SO_4$	Pigs for fattening: — in Member States where the mean density of the porcine population is equal to or higher than 175 pigs per 100 ha of utilisable agricultural land: — up to 16 weeks: 175 (total) — in Member States where the mean density of the porcine population is lower than 175 pigs per 100 ha of utilisable agricultural land: — up to 16 weeks: 175 (total)	Not more than 50 mg/kg of copper in the complete feedingstuff may come from copper-lysine sulphate	30.9.2000 [b]
				Pigs for fattening: — in Member States where the mean density of the porcine population is equal to or higher than 175 pigs per 100 ha of utilisable agricultural land: — from 17th week up to slaughter: 35 (total) — in Member States where the mean density of the porcine population is lower than 175 pigs per 100 ha of utilisable agricultural land: — from 17th week up to six months: 100 (total) — over six months up to slaughter: 35 (total) Breeding pigs: 35 (total) Other species or categories of animals, with the exception of calves prior to the start of rumination and sheep: 35 (total)	Not more than 25 mg/kg of copper in the complete feedingstuffs may come from copper-lysine sulphate	30.9.2000

BINDERS, ANTI-CAKING AGENTS AND COAGULANTS

No (or EC No)	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					mg/kg of complete feedingstuff			
3	Clinoptilolite of volcanic origin	Calcium hydrated aluminosilicate of volcanic origin containing minimum 85% of clinoptilolite and a maximum of 15% of feldspar, micas and clays, free of fibres and quartz. Maximum lead content of 80 mg/kg	Pigs	—	—	20 000	All feedingstuffs	30.9.2000 [c]
			Rabbits	—	—	20 000	All feedingstuffs	30.9.2000 [c]
			Poultry	—	—	20 000	All feedingstuffs	30.9.2000 [c]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
1	3-phytase EC 3.1.3.8	Preparation of 3-phytase produced by *Aspergillus niger* (CBS 114.94) having a minimum phytase activity of 5 000 FTU [1]/g for solid and liquid preparations	Turkeys	—	125 FTU	—	1. Indicate in the directions for use for the additive and the premixture the storage temperature, storage duration and stability on pelleting 2. Recommended dose per kg of complete feedingstuff: 200 to 800 FTU 3. For use in compound feedingstuffs with a minimum content of 0,3% phytate, e.g. 20% wheat	30.9.2000 [a]
2	3-phytase EC 3.1.3.8	Preparation of 3–phytase produced by *Aspergillus oryzae* (DSM 10 289) having a minimum activity of: Coated form: 2 500 FYT [2]/g Liquid form: 5 000 FYT/g	Piglets	Four months	250 FYT	1 000 FYT	1. In the directions for use of the additive and the premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 FYT 3. For use in compound feed rich in phytates, e.g. containing more than 40% cereals (corn, barley, oats, wheat, rye, triticale), oilseeds and pulses	30.9.2000 [d]
			Pigs for fattening	—	400 FYT	1 000 FYT	1. In the directions for use of the additive and the premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 FYT 3. For use in compound feed rich in phytates, e.g. containing more than 40% cereals (corn, barley, oats, wheat, rye, triticale), oilseeds and pulses	30.9.2000 [d]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
			Chickens for fattening	—	200 FYT	1 000 FYT	1. In the directions for use of the additive and the premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 FYT 3. For use in compound feed rich in phytates, e.g. containing more than 40% cereals (corn, barley, oats, wheat, rye, triticale), oilseeds and pulses	30.9.2000 ([d])
			Laying hens	—	500 FYT	1 000 FYT	1. In the directions for use of the additive and the premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 750 FYT 3. For use in compound feed rich in phytates, e.g. containing more than 40% cereals (corn, barley, oats, wheat, rye, triticale), oilseeds and pulses	30.9.2000 ([f])
3	Alpha-galactosidase EC 3.2.1.22	Preparation of alpha-galactosidase produced by *Aspergillus oryzae* (DSM 10 286) having a minimum activity of: Liquid form: 1 000 GALU ([3])/g	Chickens for fattening	—	300 GALU	1 000 GALU	1. In the directions for use of the additive and the premixture, indicate the storage temperature, storage life, and stability on pelleting 2. Recommended dose per kg of complete feedingstuff: 450 GALU 3. For use in compound feed rich in oligosaccharides, e.g. containing more than 25% soy meal, cotton seed cakes, peas	30.9.2000 ([d])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
4	Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus aculeatus* (CBS 589.94) having a minimum activity of: Coated form: 50 FBG ([4])/g Liquid form: 120 FBG/g	Piglets	Four months	25 FBG	40 FBG	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 25 FBG 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-clucans), e.g. containing more than 50% corn or barley	30.9.2000 ([d])
5	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Aspergillus oryzae* (DSM 10287) having a minimum activity of: Coated form: 1 000 FXU ([5])/g Liquid form: 650 FXU/ml	Chickens for fattening	—	80 FXU	200 FXU	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 150 FXU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 50% wheat	30.9.2000 ([d])
			Turkeys for fattening	—	225 FXU	600 FXU	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 225 to 600 FXU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 50% wheat	30.9.2000 ([d])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
			Piglets	Four months	200 FXU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 200 FXU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 50% wheat	30.9.2000 [d]
6	Endo-1,4-beta-xylanase EC 3.2.1.8 Endo-1,4-beta-glucanase EC 3.2.1.4	Preparation of endo-1,4-beta-xylanase and endo-1,4-beta-glucanase produced by *Humicola insolens* (DSM 10442) having a minimum activity of: Coated form: 800 FXU [6]/g 75 FBG [7]/g Microgranulated form: 800 FXU/g 75 FBG/g Liquid form: 550 FXU/ml 50 FBG/ml	Chickens for fattening	—	200 FXU 19 FBG	1 000 FXU 94 FBG	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 400 FXU 38 FBG 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 30% barley and/or oats, wheat	30.9.2000 [d]
			Piglets	Four months	240 FXU 22 FBG	1 000 FXU 94 FBG	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 400 FXU 38 FBG 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 30% barley and/or oats, wheat	30.9.2000 [d]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
			Pigs for fattening	—	200 FXU 19 FBG	800 FXU 75 FBG	1. In the conditions of use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of feedingstuff: 400 FXU 38 FBG 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 30% barley and/or oats, wheat	30.9.2000 (g)
7	Endo-1,4-beta-xylanase EC 3.2.1.8 Endo-1,4-beta-glucanase EC 3.2.1.4	Preparation of endo-1,4-beta-xylanase and endo 1,4-beta-glucanase produced by *Aspergillus niger* (CBS 600.94) having a minimum activity of: Solid and liquid forms: 12 000 FXU (8)/g 5 000 BGU (9)/g	Chickens for fattening	—	3 600 FXU 1 500 BGU	12 000 FXU 5 000 BGU	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 3 600 to 6 000 FXU 1 500 to 2 500 BGU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 40% wheat, rye, triticale	30.9.2000 (d)

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
8	Endo-1,4-beta-glucanase EC 3.2.1.4 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-glucanase and endo-1,4-beta-xylanase produced by *Aspergillus niger* (CBS 600.94) having a minimum activity of: Solid and liquid forms: 10 000 BGU ([10])/g 4 000 FXU ([11])/g	Chickens for fattening	—	3 000 BGU 1 200 FXU	10 000 BGU 4 000 FXU	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 3 000 to 10 000 BGU 1 200 to 4 000 FXU 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 30% barley	30.9.2000 ([d])
			Piglets	Four months	3 000 BGU 1 200 FXU	5 000 BGU 2 000 FXU	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 3 000 to 5 000 BGU 1 200 to 2 000 FXU 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 30% barley	30.9.2000 ([f])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
9	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Aspergillus niger* (CBS 270.95) having a minimum activity of: Solid form: 28 000 EXU ([12])/g Liquid form: 14 000 EXU/ml	Chickens for fattening	—	1 400 EXU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 1 400 EXU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 50% wheat	30.9.2000 ([d])
10	Alpha-amylase EC 3.2.1.1	Preparation of alpha-amylase produced by *Bacillus amyloliquefaciens* (CBS 360.94) having a minimum activity of: Solid form: 45 000 RAU ([13])/g Liquid form: 20 000 RAU/ml	Piglets	Four months	1 800 RAU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 1 800 RAU 3. For use, exclusively, in compound feed destined for liquid feeding systems, and containing starch-rich feed materials (e.g. containing more than 35% wheat)	30.9.2000 ([d])
			Pigs for fattening	—	1 800 RAU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 1 800 RAU 3. For use, exclusively, in compound feed destined for liquid feeding systems, and containing starch-rich feed materials (e.g. containing more than 35% wheat)	30.9.2000 ([d])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content / Maximum content (Units of activity per kg of complete feedingstuff)		Other provisions	Period of authorisation
			Sows	—	1 800 RAU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 1 800 RAU 3. For use, exclusively, in compound feed destined for liquid feeding systems, and containing starch-rich feed materials (e.g. containing more than 35% wheat)	30.9.2000 [d]
11	Endo-1,4-beta-glucanase EC 3.2.1.4 Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-glucanase, endo-1,3(4)-beta-glucanase and endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 74 252) having a minimum activity of: Endo-1,4-beta-glucanase: 8 000 U [14]/ml Endo-1,3(4)-beta-glucanase: 18 000 U [15]/ml Endo-1,4-beta-xylanase: 26 000 U [16]/ml	Chickens for fattening	—	Endo-1,4-beta-glucanase: 400 U Endo-1,3(4)-beta-glucanase: 900 U Endo-1,4-beta-xylanase: 1 300 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-glucanase: 400 to 1 600 U endo-1,3(4)-beta-glucanase: 900 to 3 600 U endo-1,4-beta-xylanase: 1 300 to 5 200 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 30% wheat or barley and 10% rye	30.9.2000 [d]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
12	Endo-1,4-beta-glucanase EC 3.2.1.4 Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-glucanase, endo-1,3(4)-beta-glucanase and endo-1,4-beta-xylanase produced by *Trichoderma viride* (FERM BP-4447) having a minimum activity of: Endo-1,4-beta-glucanase: 8 000 U ([17])/g Endo-1,3(4)-beta-glucanase: 18 000 U ([18])/g Endo-1,4-beta-xylanase: 26 000 U ([19])/g	Chickens for fattening	—	Endo-1,4-beta-glucanase: 200 U Endo-1,3(4)-beta-glucanase: 450 U Endo-1,4-beta-xylanase: 650 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-glucanase: 800 to 1 200 U endo-1,3(4)-beta-glucanase: 1 800 to 2 700 U endo-1,4-beta-xylanase: 2 600 to 3 900 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 20 % wheat and 20 % barley, and/or 25 % rye	30.9.2000 ([d])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
			Laying hens	—	Endo-1,4-beta-glucanase: 640 U Endo-1,3(4)-beta-glucanase: 1 440 U Endo-1,4-beta-xylanase: 2 080 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,4-beta-glucanase: 640 to 1 280 U endo-1,3(4)-beta-glucanase: 1 440 to 2 880 U endo-1,4-beta-xylanase: 2 080 to 4 160 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 20% wheat and 20% barley and/or 25% rye	30.9.2000 [d]
			Turkeys for fattening	—	Endo-1,4-beta-glucanase: 1 200 U Endo-1,3(4)-beta-glucanase: 2 700 U Endo-1,4-beta-xylanase: 3 900 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,4-beta-glucanase: 1 200 U endo-1,3(4)-beta-glucanase: 2 700 U endo-1,4-beta-xylanase: 3 900 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 20% wheat and 20% barley and/or 20% rye	30.9.2000 [d]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
13	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase and endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (CBS 357.94) having a minimum activity of: Powder form: 8 000 BGU ([20])/g 11 000 EXU ([21])/g Granulated form: 6 000 BGU/g 8 250 EXU/g Liquid form: 2 000 BGU/ml 2 750 EXU/ml	Chickens for fattening	—	100 BGU 130 EXU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: 100 BGU 130 EXU 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 30% wheat and 30% barley or 20% rye	30.9.2000 ([d])
14	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Aspergillus niger* (CBS 520.94) having a minimum activity of: Solid form: 600 U ([22])/g Liquid form: 300 U/ml	Chickens for fattening	—	300 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 300 to 600 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 50% wheat	30.9.2000 ([d])
15	Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma viride* (CBS 517.94) having a minimum activity of: Solid form: 650 U ([23])/g Liquid form: 325 U/ml	Chickens for fattening	—	325 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 325 to 650 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 50% barley	30.9.2000 ([d])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
16	Endo-1,4-beta-glucanase EC 3.2.1.4	Preparation of endo-1,4-beta-glucanase produced by *Trichoderma longibrachiatum* (IMI SD 142) having a minimum activity of: Solid form: 1 000 CU ([24])/g Liquid form: 2 000 CU/ml	Chickens for fattening	—	250 CU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 to 1 000 CU 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 40 % barley	30.9.2000 ([d])
			Laying hens	—	250 CU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 to 1 000 CU 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 40 % barley	30.9.2000 ([d])
			Piglets	Four months	250 CU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 to 1 000 CU 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 40 % barley	30.9.2000 ([d])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
			Pigs for fattening	—	250 CU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 to 1 000 CU 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 40 % barley	30.9.2000 [d]
17	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (IMI SD 135) having a minimum activity of: Solid form: 3 000 EPU [25]/g Liquid form: 6 000 EPU/ml	Chickens for fattening	—	750 EPU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 1 500 to 3 000 EPU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 40 % wheat or maize	30.9.2000 [d]
			Laying hens	—	750 EPU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 1 500 to 3 000 EPU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 40 % wheat or maize	30.9.2000 [d]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
			Piglets	Four months	750 EPU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 1 500 to 3 000 EPU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 40 % wheat or maize	30.9.2000 [d]
			Pigs for fattening	—	750 EPU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 1 500 to 3 000 EPU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 40 % wheat or maize	30.9.2000 [d]
18	Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus niger* (MUCL 39199) having a minimum activity of: Solid form: 2 000 AGL [26]/g Liquid form: 500 AGL/ml	Chickens for fattening	—	100 AGL	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 100 AGL 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 40 % barley and 20 % wheat	30.9.2000 [d]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
19	Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus niger* (MUCL 39199) having a minimum activity of: Solid form: 1 500 AGL ([27])/g Liquid form: 200 AGL/g	Chickens for fattening	—	25 AGL	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 25 to 100 AGL 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 50% barley	30.9.2000 ([d])
20	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (MUCL 39203) having a minimum activity of: Solid form: 2 000 AXC ([28])/g Liquid form: 500 AXC/ml	Chickens for fattening	—	100 AXC	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 100 AXC 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 40% wheat or rye	30.9.2000 ([d])
21	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (MUCL 39203) having a minimum activity of: Solid form: 1 500 AXC ([29])/g Liquid form: 200 AXC/g	Chickens for fattening	—	25 AXC	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 25 to 100 AXC 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 50% wheat	30.9.2000 ([d])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
22	Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (CNCM MA 6-10 W) having a minimum activity of: Solid form: 70 000 BGN ([30])/g Liquid form: 14 000 BGN/ml	Chickens for fattening	—	1 050 BGN	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 2 800 BGN 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 50% barley	30.9.2000 ([d])
23	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (CNCM MA 6-10 W) having a minimum activity of: Solid form: 70 000 IFP ([31])/g Liquid form: 7 000 IFP/ml	Chickens for fattening	—	1 050 IFP	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 1 400 IFP 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 56% wheat	30.9.2000 ([d])
24	Endo-1,4-beta-xylanase EC 3.2.1.8 Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,4-beta-xylanase and endo-1,3(4)-beta-glucanase produced by *Aspergillus niger* (CNCM I-1517) having a minimum activity of: 28 000 QXU ([32])/g 140 000 QGU ([33])/g	Chickens for fattening	—	420 QXU 2 100 QGU	1 120 QXU 5 600 QGU	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: 560 QXU 2 800 QGU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 30% wheat and 30% barley	30.9.2000 ([d])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
25	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase and endo-1,4-beta-xylanase produced by *Aspergillus niger* (NRRL 25541) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 1 100 U ([34])/g Endo-1,4-beta-xylanase: 1 600 U ([35])/g	Chickens for fattening	—	Endo-1,3(4)-beta-glucanase: 138 U Endo-1,4-beta-xylanase: 200 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 138 U endo-1,4-beta-xylanase: 200 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 50 % barley or 30 % wheat and 30 % corn	30.9.2000 ([d])
			Laying hens	—	Endo-1,3(4)-beta-glucanase: 138 U Endo-1,4-beta-xylanase: 200 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 138 U endo-1,4-beta-xylanase: 200 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 50 % barley or 30 % wheat and 30 % corn	30.9.2000 ([d])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
26	Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma reesei* (CBS 526.94) having minimum activity of: Solid form: 350 000 BU ([36])/g Liquid form: 50 000 BU/g	Chickens for fattening	—	23 000 BU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 23 000 to 50 000 BU 3. For use in compound feed rich in non-starch polysaccharides (mainly glucans), e.g. containing more than 20 % barley or 30 % rye	30.9.2000 ([e])
			Piglets	Four months	26 000 BU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 26 000 to 35 000 BU 3. For use in compound feed rich in non-starch polysaccharides (mainly glucans), e.g. containing more than 60 % barley or wheat	30.9.2000 ([e])
27	Endo-1,4-beta-xylanase EC 3.2.1.8 Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma reesei* (CBS 529.94) and endo-1,3(4)-beta-glucanase produced by *Trichoderma reesei* (CBS 526.94) having a minimum activity of: Solid form: 200 000 BXU ([37])/g 200 000 BU ([38])/g Liquid form: 30 000 BXU/g 30 000 BU/g	Chickens for fattening	—	2 500 BXU 2 500 BU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 10 000 BXU 10 000 BU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and glucans), e.g. containing more than 40 % wheat or 30 % rye	30.9.2000 ([e])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
28	3-phytase EC 3.1.3.8	Preparation of 3-phytase produced by *Trichoderma reesei* (CBS 528.94) having a minimum activity of: Solid form: 5 000 PPU ([39])/g Liquid form: 1 000 PPU/g	Piglets	Four months	250 PPU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 to 750 PPU 3. For use in compound feed rich in phytates, e.g. containing more than 50% cereals (corn, barley, wheat), tapioca, oilseeds and pulses	30.9.2000 ([e])
			Pigs for fattening	—	500 PPU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 to 750 PPU 3. For use in compound feed rich in phytates, e.g. containing more than 50% cereals (corn, barley, wheat), tapioca, oilseeds and pulses	30.9.2000 ([e])
29	Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,3(4)-beta-glucanase produced by *Geosmithia emersonii* (IMI SD 133) having a minimum activity of: 5 500 U ([40])/g	Chickens for fattening	—	250 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 250 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 50% barley	30.9.2000 ([f])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
30	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase and endo-1,4-beta-xylanase produced by *Penicillium funiculosum* (IMI SD 101) having a minimum activity of: Powder form: Endo-1,3(4)-beta-glucanase: 2 000 U ([41])/g Endo-1,4-beta-xylanase: 1 400 U ([42])/g Liquid form: Endo-1,3(4)-beta-glucanase: 500 U/ml Endo-1,4-beta-xylanase: 350 U/ml	Chickens for fattening	—	Endo-1,3(4)-beta-glucanase: 100 U Endo-1,4-beta-xylanase: 70 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 100 U endo-1,4-beta-xylanase: 70 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 50 % barley or 60 % wheat	30.9.2000 ([f])
31	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (CBS 614.94) having a minimum activity of: Solid form: 300 EU ([43])/g Liquid form: 1 000 EU/g	Chickens for fattening	—	600 EU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 600 EU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 60 % wheat	30.9.2000 ([f])
			Laying hens	—	300 EU	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 600 EU 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 60 % wheat	30.9.2000 ([f])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
32	Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) having a minimum activity of: 200 U ([44])/ml	Chickens for fattening	—	100 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 100 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 30% barley	30.9.2000 ([g])
		1 200 U/ml	Piglets	Four months	400 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 400 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 55% barley	30.9.2000 ([g])
			Pigs for fattening	—	500 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 70% barley	30.9.2000 ([g])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
33	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) having a minimum activity of: Powder form: 2 000 U ([45])/g Liquid form: 5 000 U/ml	Chickens for fattening	—	500 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 500 to 2 500 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 55% wheat or 60% rye	30.9.2000 ([g])
			Laying hens	—	2 000 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 2 000 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 35% wheat	30.9.2000 ([g])
		Powder form: 4 000 U/g Liquid form: 10 000 U/ml	Piglets	Four months	5 000 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 5 000 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 45% wheat	30.9.2000 ([g])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
		Powder form: 4 000 U/g Liquid form: 8 000 U/ml	Pigs for fattening	—	4 000 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 4 000 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 35% wheat	30.9.2000 [g]
34	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Alpha-amylase EC 3.2.1.1	Preparation of endo-1,3(4)-beta-glucanase and endo-1,4-beta-xylanase produced by *Aspergillus niger* (NRRL 25541) and of alpha-amylase produced by *Aspergillus oryzae* (ATCC 66222) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 275 U [46]/g Endo-1,4-beta-xylanase: 400 U [47]/g Alpha-amylase: 3 100 U [48]/g	Piglets	Four months	Endo-1,3(4)-beta-glucanase: 165 U Endo-1,4-beta-xylanase: 240 U Alpha-amylase: 1 860 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and the stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 165 U endo-1,4-beta-xylanase: 240 U alpha-amylase: 1 860 U 3. For use in compound feed containing cereals rich in starch and non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 45% barley and 10% wheat or 10% maize	30.9.2000 [h]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
35	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) having a minimum activity of: endo-1,3(4)-beta-glucanase: 80 U ([49])/g endo-1,4-beta-xylanase: 180 U ([50])/g	Laying hens	—	Endo-1,3(4)-beta-glucanase: 80 U Endo-1,4-beta-xylanase: 180 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 80 U endo-1,4-beta-xylanase: 180 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 60 % barley	30.9.2000 ([h])
36	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (IMI SD 135) having a minimum activity of: endo-1,3(4)-beta-glucanase: 300 U ([51])/g endo-1,4-beta-xylanase: 300 U ([52])/g	Chickens for fattening	—	Endo-1,3(4)-beta-glucanase: 300 U Endo-1,4-beta-xylanase: 300 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 300 U endo-1,4-beta-xylanase: 300 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 40 % barley	30.9.2000 ([h])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
			Laying hens	—	Endo-1,3(4)-beta-glucanase: 300 U Endo-1,4-beta-xylanase: 300 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 300 U endo-1,4-beta-xylanase: 300 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 35 % barley	30.9.2000 [h]
37	Endo-1,4-beta-xylanase EC 3.2.1.8 Subtilisin EC 3.4.21.62	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) and subtilisin produced by *Bacillus subtilis* (ATCC 2107) having a minimum activity of: endo-1,4-beta-xylanase: 2 500 U [53]/g subtilisin: 800 U [54]/g	Chickens for fattening	—	Endo-1,4-beta-xylanase: 500 U Subtilisin: 160 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase: 500 to 2 500 U subtilisin: 160 to 800 U 3. For use in compound feed e.g. containing more than 65 % wheat	30.9.2000 [h]
			Turkeys	—	Endo-1,4-beta-xylanase: 825 U Subtilisin: 265 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase: 825 to 2 500 U subtilisin: 265 to 800 U 3. For use in compound feed e.g. containing more than 45 % wheat	30.9.2000 [h]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
38	Endo-1,4-beta-xylanase EC 3.2.1.8 Subtilisin EC 3.4.21.62	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) and subtilisin produced by *Bacillus subtilis* (ATCC 2107) having a minimum activity of: endo-1,4-beta-xylanase: 5 000 U ([55])/g subtilisin: 500 U ([56])/g	Piglets	Four months	Endo-1,4-beta-xylanase: 5 000 U Subtilisin: 500 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase: 5 000 U subtilisin: 500 U 3. For use in compound feed e.g. containing more than 40 % wheat	30.9.2000 ([h])
39	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) having a minimum activity of: endo-1,3(4)-beta-glucanase: 400 U ([57])/g endo-1,4-beta-xylanase: 400 U ([58])/g	Pigs for fattening	—	Endo-1,3(4)-beta-glucanase: 400 U Endo-1,4-beta-xylanase: 400 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 400 U endo-1,4-beta-xylanase: 400 U 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 65 % barley	30.9.2000 ([h])
40	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Subtilisin EC 3.4.21.62	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106), endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) and subtilisin produced by *Bacillus subtilis* (ATCC 2107) having a minimum activity of: endo-1,3(4)-beta-glucanase: 100 U ([59])/g endo-1,4-beta-xylanase: 300 U ([60])/g subtilisin: 800 U ([61])/g	Chickens for fattening	—	Endo-1,3(4)-beta-glucanase: 30 U Endo-1,4-beta-xylanase: 90 U Subtilisin: 240 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 30 to 100 U endo-1,4-beta-xylanase: 90 to 300 U subtilisin: 240 to 800 U 3. For use in compound feed e.g. containing more than 60 % barley	30.9.2000 ([h])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					Units of activity per kg of complete feedingstuff			
41	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Subtilisin EC 3.4.21.62	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106), endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) and subtilisin produced by *Bacillus subtilis* (ATCC 2107) having a minimum activity of: endo-1,3(4)-beta-glucanase: 100 U ([62])/g endo-1,4-beta-xylanase: 2 500 U ([63])/g subtilisin: 800 U ([64])/g	Chickens for fattening	—	Endo-1,3(4)-beta-glucanase: 25 U Endo-1,4-beta-xylanase: 625 U Subtilisin: 200 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 25 to 100 U endo-1,4-beta-xylanase: 625 to 2 500 U subtilisin: 200 to 800 U 3. For use in compound feed e.g. containing more than 30% wheat and 10% barley	30.9.2000 ([h])
			Laying hens	—	Endo-1,3(4)-beta-glucanase: 100 U Endo-1,4-beta-xylanase: 2 500 U Subtilisin: 800 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuffs: endo-1,3(4)-beta-glucanase: 100 U endo-1,4-beta-xylanase: 2 500 U subtilisin: 800 U 3. For use in compound feed e.g. containing more than 50% wheat and 25% barley	30.9.2000 ([h])
42	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (IMI SD 135) having a minimum activity of: Solid form: 4 000 U ([65])/g Characteristics of the authorised preparation: endo-1,4-beta-xylanase: 1,99% wheat: 97,7% calcium propionate: 0,3% lecithin: 0,01%	Piglets	Four months	4 000 U	—	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: 4 000 U 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 60% wheat	30.9.2000 ([h])

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					CFU/kg of complete feedingstuff			
1	*Bacillus cereus* var. *toyoi* NCIMB 40112/CNCM I-1012	Preparation of *Bacillus cereus* var. *toyoi* containing a minimum of 1×10^{10} CFU/g additive	Chickens for fattening	—	$0,2 \times 10^{9}$	1×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting May be used in compound feed containing the permitted coccidiostats: monensin sodium, lasolacid sodium, salinomycin sodium, amprolium-ethopabate, meticlorpindol-methyl benzoquate, decoquinate, robenidine, narasin, halofuginone	30.9.2000 (g)
			Laying hens	—	$0,2 \times 10^{9}$	1×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (g)
			Calves	Six months	$0,5 \times 10^{9}$	1×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (g)
			Cattle for fattening	—	$0,2 \times 10^{9}$	$0,2 \times 10^{9}$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting The quantity of *Bacillus cereus* var. *toyoi* in the daily ration must not exceed $1,0 \times 10^{9}$ CFU for 100 kg body weight. Add $0,2 \times 10^{9}$ CFU for each additional 100 kg body weight.	30.9.2000 (g)

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					CFU/kg of complete feedingstuff			
			Breeding does	—	$0,1 \times 10^9$	5×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting May be used in compound feed containing the permitted coccidiostats: robenidine	30.9.2000 (g)
			Rabbits for fattening	—	$0,1 \times 10^9$	5×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting May be used in compound feed containing the permitted coccidiostats: meticlorpindol, robenidine, salinomycin sodium	30.9.2000 (g)
3	*Saccharomyces cerevisiae* NCYC Sc 47	Preparation of *Saccharomyces cerevisiae* containing a minimum of 5×10^9 CFU/g additive	Rabbits for fattening	—	$2,5 \times 10^9$	5×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting May be used in compound feed containing the permitted coccidiostat: meticlorpindol	30.9.2000 (d)
			Sows	—	5×10^9	$2,5 \times 10^{10}$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (d)
			Piglets	Four months	5×10^9	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (d)

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					CFU/kg of complete feedingstuff			
4	*Bacillus cereus* ATCC 14 893	Preparation of *Bacillus cereus* containing a minimum of 10^{10} CFU/g additive	Piglets	Four months	5×10^8	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (d)
			Pigs for fattening	—	2×10^8	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (d)
			Sows	15 days before farrowing and during lactation	$8{,}5 \times 10^8$	$1{,}2 \times 10^9$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (d)
			Calves	16 weeks	1×10^9	$1{,}2 \times 10^9$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (d)
			Chickens for fattening	—	2×10^8	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting May be used in compound feed containing the permitted coccidiostats: amprolium, halofuginone, lasalocid sodium, maduramicin ammonium, monensin sodium, narasin, salinomycin sodium, meticlorpindol, diclazuril	30.9.2000 (d)
			Turkeys for fattening	26 weeks	2×10^8	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting May be used in compound feed containing the permitted coccidiostats: amprolium, halofuginone, meticlorpindol/methylbenzoquate, diclazuril, nifursol	30.9.2000 (d)

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					CFU/kg of complete feedingstuff			
5	*Saccharomyces cerevisiae* CBS 493.94	Preparation of *Saccharomyces cerevisiae* containing a minimum of 1×10^8 CFU/g additive	Calves	Six months	2×10^8	2×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 [d]
			Cattle for fattening	—	$1{,}7 \times 10^8$	$1{,}7 \times 10^8$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed $7{,}5 \times 10^8$ CFU for 100 kg body weight. Add 1×10^8 CFU for each extra 100 kg body weight	30.9.2000 [f]
6	*Saccharomyces cerevisiae* CNCM I-1079	Preparation of *Saccharomyces cerevisiae* containing a minimum of 2×10^{10} CFU/g additive	Sows	—	2×10^9	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 [d]
			Piglets	Four months	6×10^9	3×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 [d]
7	*Saccharomyces cerevisiae* CNCM I-1077	Preparation of *Saccharomyces cerevisiae* containing a minimum of 2×10^{10} CFU/g additive	Dairy cows	—	$5{,}5 \times 10^8$	$2{,}1 \times 10^9$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed $8{,}4 \times 10^9$ CFU for 100 kg body weight. Add $1{,}8 \times 10^9$ CFU for each additional 100 kg body weight	30.9.2000 [d]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					CFU/kg of complete feedingstuff			
			Cattle for fattening	—	1×10^9	$1{,}5 \times 10^9$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed $4{,}6 \times 10^9$ CFU for 100 kg body weight. Add 2×10^9 CFU for each additional 100 kg body weight.	30.9.2000 [d]
8	*Enterococcus faecium* ATCC 53519 *Enterococcus faecium* ATCC 55593 (In a 1/1 ratio)	Mixture of encapsulated *Enterococcus faecium* ATCC 53519 and encapsulated *Enterococcus faecium* ATCC 55593 containing a minimum of 2×10^8 CFU/g of the additive (i.e. a minimum of 1×10^8 CFU/g of each bacterium)	Chickens for fattening	—	1×10^8	1×10^8	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting May be used in compound feed containing the permitted coccidiostats: amprolium, decoquinate, halofuginone, lasalocid sodium, maduramicin ammonium, monensin sodium, narasin, nicarbazin, narasin/nicarbazin, salinomycin sodium	30.9.2000 [d]
9	*Pediococcus acidilactici* CNCM MA 18/5M	Preparation of *Pediococcus acidilactici* containing a minimum of 1×10^{10} CFU/g of additive	Chickens for fattening	—	1×10^9	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting May be used in compound feed containing the permitted coccidiostats: amprolium, meticlorpindol, decoquinate, halofuginone, narasin, salinomycin sodium, nicarbazin, maduramicin ammonium, diclazuril	30.9.2000 [f]
			Piglets	Four months	1×10^9	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 [f]

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					CFU/kg of complete feedingstuff			
			Pigs	—	1×10^9	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (f)
10	*Enterococcus faecium* NCIMB 10415	Preparation of *Enterococcus faecium* containing a minimum of Microencapsulated form:: $1{,}0 \times 10^{10}$ CFU/g additive $1{,}75 \times 10^{10}$ CFU/g additive	Chickens for fattening	—	$0{,}3 \times 10^9$	$2{,}8 \times 10^9$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting May be used in compound feed containing the permitted coccidiostats: amprolium, amprolium/ethopabate, diclazuril, halofuginone, maduramicin ammonium, meticlorpindol, meticlorpindol/methylbenzoquate, monensin sodium, robenidine, salinomycin sodium	30.9.2000 (f)
			Pigs	—	$0{,}35 \times 10^9$	$1{,}5 \times 10^9$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (f)
			Sows	—	$0{,}2 \times 10^9$	$1{,}25 \times 10^9$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (f)
			Cattle for fattening	—	$0{,}25 \times 10^9$	$0{,}6 \times 10^9$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting The quantity of *Enterococcus faecium* in the daily ration must not exceed 1×10^9 CFU for 100 kg body weight. Add 1×10^9 CFU for each additional 100 kg body weight	30.9.2000 (f)

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					CFU/kg of complete feedingstuff			
		Preparation of *Enterococcus faecium* containing a minimum of: Microencapsulated form: $1,0 \times 10^{10}$ CFU/g additive $1,75 \times 10^{10}$ CFU/g additive and Granulated form: $3,5 \times 10^{10}$ CFU/g additive	Piglets	Four months	$0,3 \times 10^{9}$	$1,4 \times 10^{9}$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting Granulated form to be used exclusively in milk replacers	30.9.2000 (f)
			Calves	Six months	$0,35 \times 10^{9}$	$6,6 \times 10^{9}$	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting Granulated form to be used exclusively in milk replacers	30.9.2000 (f)
11	*Enterococcus faecium* DSM 5464	Preparation of *Enterococcus faecium* containing a minimum of: 5×10^{10} CFU/g additive	Piglets	Four months	$0,5 \times 10^{9}$	1×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (f)
12	*Lactobacillus farciminis* CNCM MA 67/4R	Preparation of *Lactobacillus farciminis* containing a minimum of: 1×10^{9} CFU/g additive	Piglets	Four months	1×10^{9}	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (g)

No	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	Period of authorisation
					CFU/kg of complete feedingstuff			
13	*Enterococcus faecium* DSM 10 663/ NCIMB 10 415	Preparation of *Enterococcus faecium* containing a minimum of: Powder and granulated forms: $3,5 \times 10^{10}$ CFU/g additive Coated form: $2,0 \times 10^{10}$ CFU/g additive Liquid form: 1×10^{10} CFU/g additive	Piglets	Four months	1×10^{9}	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (g)
			Calves	Six months	1×10^{9}	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (h)
			Chickens for fattening	—	1×10^{9}	1×10^{10}	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting 2. May be used in compound feed containing the permitted coccidiostats: amprolium, amprolium ethopabat, decoquinate, diclazuril, halofuginone, lasalocid sodium, maduramicin ammonium, meticlorpindol/methyl-benzoquate, monensin sodium, narasin, nicarbazin, robenidine, salinomycin sodium	30.9.2000 (h)
14	*Saccharomyces cerevisiae* MUCL 39 885	Preparation of *Saccharomyces cerevisiae* containing a minimum of: Powder, spheric and oval granulated forms: 1×10^{9} CFU/g additive	Piglets	Four months	3×10^{9}	3×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.9.2000 (g)
			Cattle for fattening	—	9×10^{9}	9×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed $1,6 \times 10^{10}$ CFU per 100 kg body weight. Add $3,2 \times 10^{9}$ CFU for each additional 100 kg body weight	30.9.2000 (g)

([a]) First authorisation Commission Regulation (EC) No 2316/98 (OJ L 289, 28.10.1998, p. 4).
([b]) First authorisation Commission Regulation (EC) No 639/1999 (OJ L 82, 26.3.1999, p. 6).
([c]) First authorisation Commission Regulation (EC) No 1245/1999 (OJ L 150, 17.6.1999, p. 15).
([d]) First authorisation Commission Regulation (EC) No 1436/98 (OJ L 191, 7.7.1998, p. 15).
([e]) First authorisation Commission Regulation (EC) No 2374/98 (OJ L 295, 4.11.1998, p. 3).
([f]) First authorisation Commission Regulation (EC) No 866/1999 (OJ L 108, 27.4.1999, p. 21).
([g]) First authorisation Commission Regulation (EC) No 1411/1999 (OJ L 164, 30.6.1999, p. 56).
([h]) First authorisation Commission Regulation (EC) No 1636/1999 (OJ L 194, 27.7.1999, p. 17).
([1]) FTU is the amount of enzyme which liberates 1 micromole of inorganic phosphate per minute from sodium phytate at pH 5,5 and 37 °C.
([2]) FYT is the amount of enzyme which liberates 1 micromole of inorganic phosphate per minute from sodium phytate at pH 5,5 and 37 °C.
([3]) 1 GALU is the amount of enzyme which hydrolyses 1 micromole of p-nitrophenyl-alpha-galactopyranoside per minute at pH 5,0 and 30 °C.
([4]) 1 FBG is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5,5 and 37 °C.
([5]) 1 FXU is the amount of enzyme which liberates 7,8 micromoles of reducing sugars (xylose equivalents) from azo-wheat arabinoxylan per minute at pH 6,0 and 50 °C.
([6]) 1 FXU is the amount of enzyme which liberates 3,1 micromoles of reducing sugars (xylose equivalents) from azo-wheat arabinoxylan per minute at pH 6,0 and 50 °C.
([7]) 1 FBG is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 6,0 and 50 °C.
([8]) 1 FXU is the amount of enzyme which liberates 0,15 micromoles of xylose from azurine-cross-linked xylan per minute at pH 5,0 and 40 °C.
([9]) 1 BGU is the amount of enzyme which liberates 0,15 micromoles of glucose from azurine-cross-linked beta-glucan per minute at pH 5,0 and 40 °C.
([10]) 1 BGU is the amount of enzyme which liberates 0,15 micromoles of glucose from azurine-cross-linked beta-glucan per minute at pH 5,0 and 40 °C.
([11]) 1 FXU is the amount of enzyme which liberates 0,15 micromoles of xylose from azurine-cross-linked-xylan per minute at pH 5,0 and 40 °C.
([12]) 1 EXU is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from arabinoxylan per minute at pH 3,5 and 55 °C.
([13]) 1 RAU is the amount of enzyme which converts 1 mg of soluble starch into a product having an equal absorption to a reference colour at 620 nm after reaction with iodine, per minute at pH 6,6 and 30 °C.
([14]) 1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from carboxymethylcellulose per minute at pH 5,0 and 40 °C.
([15]) 1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from barley beta-glucan per minute at pH 5,0 and 40 °C.
([16]) 1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from oat spelt xylan per minute at pH 5,0 and 40 °C.
([17]) 1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from carboxymethylcellulose per minute at pH 5,0 and 40 °C.
([18]) 1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from barley beta-glucan per minute at pH 5,0 and 40 °C.
([19]) 1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from oat spelt xylan per minute at pH 5,0 and 40 °C.
([20]) 1 BGU is the amount of enzyme which liberates 0,278 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 3,5 and 40 °C.
([21]) 1 EXU is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from wheat arabinoxylan per minute at pH 3,5 and 55 °C.
([22]) 1 U is the amount of enzyme which liberates 1 micromole of xylose from birchwood xylan per minute at pH 5,3 and 50 °C.
([23]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5,0 and 30 °C.
([24]) 1 CU is the amount of enzyme which liberates 0,128 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 4,5 and 30 °C.
([25]) 1 EPU is the amount of enzyme which liberates 0,0083 micromoles of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 4,7 and 30 °C.
([26]) 1 AGL is the amount of enzyme which liberates 5,55 micromoles of reducing sugars (maltose equivalents) from barley beta-glucan per minute at pH 4,6 and 30 °C.
([27]) 1 AGL is the amount of enzyme which liberates 5,55 micromoles of reducing sugars (maltose equivalents) from barley beta-glucan per minute at pH 4,6 and 30 °C.
([28]) 1 AXC is the amount of enzyme which liberates 17,2 micromoles of reducing sugars (maltose equivalents) from oat xylan per minute at pH 4,7 and 30 °C.
([29]) 1 AXC is the amount of enzyme which liberates 17,2 micromoles reducing sugars (maltose equivalents) from oat xylan per minute at pH 4,7 and 30 °C.
([30]) 1 BGN is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 4,8 and 50 °C-
([31]) 1 IFP is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat xylan per minute at pH 4,8 and 50 °C.
([32]) 1 QXU is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat xylan per minute at pH 5,1 and 50 °C.
([33]) 1 QGU is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 4,8 and 50 °C.
([34]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from oat beta-glucan per minute at pH 4,0 and 30 °C.
([35]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat xylan per minute at pH 4,0 and 30 °C.
([36]) 1 BU is the amount of enzyme which liberates 0,06 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 4,8 and 50 °C.
([37]) 1 BXU is the amount of enzyme which liberates 0,06 micromoles of reducing sugars (xylose equivalents) from birch xylan per minute at pH 5,3 and 50 °C.
([38]) 1 BU is the amount of enzyme which liberates 0,06 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 4,8 and 50 °C.
([39]) 1 PPU is the amount of enzyme which liberates 1 micromole of inorganic phosphate from sodium phytate per minute at pH 5,0 at 37 °C.
([40]) 1 U is the amount of enzyme which liberates 2,78 micromoles of reducing sugars (maltose equivalents) from barley beta-glucan per minute at pH 5,0 and 50 °C.
([41]) 1 U is the amount of enzyme which liberates 5,55 micromoles of reducing sugars (maltose equivalents) from barley beta-glucan per minute at pH 5,0 and 50 °C.
([42]) 1 U is the amount of enzyme which liberates 4,00 micromoles of reducing sugars (maltose equivalents) from birchwood xylan per minute at pH 5,5 and 50 °C.
([43]) 1 EU is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat xylan per minute at pH 4,5 and 40 °C.
([44]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5,0 and 30 °C.
([45]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5,3 and 50 °C.
([46]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from oat beta-glucan per minute at pH 4,0 and 30 °C.
([47]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from oat xylan per minute at pH 4,0 and 30 °C.
([48]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from wheat starch per minute at pH 4,0 and 30 °C.
([49]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5,0 and 30 °C.
([50]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5,3 and 50 °C.
([51]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5,0 and 30 °C.
([52]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5,3 and 50 °C.
([53]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5,3 and 50 °C.
([54]) 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from a casein substrate per minute at pH 7,5 and 40 °C.
([55]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) oat spelt xylan per minute at pH 5,3 and 50 °C.

([56]) 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from a casein substrate per minute at pH 7,5 and 40 °C.
([57]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5,0 and 30 °C.
([58]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5,3 and 50 °C.
([59]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5,0 and 30 °C.
([60]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5,3 and 50 °C.
([61]) 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from a casein substrate per minute at pH 7,5 and 40 °C.
([62]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5,0 and 30 °C.
([63]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5,3 and 50 °C.
([64]) 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from a casein substrate per minute at pH 7,5 and 40 °C.
([65]) 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5,3 and 50 °C.